

# 浙江大学爱丁堡大学联合学院

Zhejiang University - University of Edinburgh Institute

2022年 年报

## 2022 Annual Report



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ZJE 浙江大学爱丁堡大学联合学院  
ZJU-UoE INSTITUTE



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# 院长致词 Dean's Message

非常荣幸，我有一段人生经历与ZJE的莘莘学子们在一起。学院扎根中华大地，同时也以海纳百川的博大胸怀，吸引接纳来自世界各地的优秀人才，创造出兼容并蓄独特气质。

我们正处于百年未有之大变局的时代，未来已来，当前生命健康领域已经成为科技创新大国竞争的主战场，医学正从以生命科学为主要支撑的学科，向与人文、工科、信息等多学科交叉融合创新迈进，ZJE致力于为不可预期未来培养人格素质，为可预期的未来积蓄学科力量，锻造创新本领。ZJE也是一个宁静致远、淡泊明志的理想学院。“宁静而致远，淡泊以明志”是中国传统文化中修养身心的最高境界，只有淡泊宁静，才能洞察凡尘，只有清心内敛，才能心存高远，星辰大海。在ZJE，我们将为大家提供一个静心、安心、舒心的学习环境，在这里，你们将始终与浙大人“求是、创新”、与浙大医学人“仁心仁术”的精神同在。来浙里，在浙里，从浙里，我们与民族的伟大复兴同频共振，与人类的健康未来相向而行。

Being with the students of ZJE has been an honorable life experience. The college rooted in China, accepting worldwide talents with its broad embracing mind and created an inclusive and unique temperament.

We are currently in a era full of changes and opportunities. The modern healthcare and life science sectors has become the global battlefields of many innovation superpowers, leading it to branch towards humanities, engineering and informatics, while keeping life science as the main supporting base for new developments. ZJE is dedicated to cultivating unforeseen personalities and characteristics, and to prepare the next generations well with new innovative skills that will thrive in the foreseeable future. ZJE is an ideal college with peace, farsightedness, selflessness and ambitious. In the Chinese traditions, these qualities are amongst the highest cultivations of minds and bodies. Only people who can achieve inner peace can be aware of their surroundings. And only people pure hearted and devoted to their subject can see beyond realities and pursue their dreams. In ZJE, we will provide a peaceful, safe and comfortable learning environment for you to relax yourselves both mentally and physically. Moreover in ZJE, you can always be with and benefit from the innovative, truthful and merciful spirits of the ZJUers. Right here in ZJE, join us as we would revive greatness of our nations, and pave the way for a healthier future for humanity.



柯越海  
Yuehai Ke  
浙江大学爱丁堡大学联合学院院长  
Dean of ZJE

# 学院概况 About Us

浙江大学爱丁堡大学联合学院 (Zhejiang University-University of Edinburgh Institute, ZJE) 是浙江大学和英国爱丁堡大学合作设立的非独立法人中外合作办学机构。ZJE扎根中国大地，融合东西方教育理念，依托学校多学科综合性优势，面向未来开展生命健康领域前沿基础研究，实施疾病诊疗的尖端科技研发，以“全人培养，全球浸染、全链实践”为理念培养医学复合型拔尖创新人才。

学院汇聚国际一流师资，设有双学位本科专业2个，单、双学位研究生项目7个。截止2022年12月30日，在册本科生488人（含国际留学生6人），研究生185人（含国际留学生9人）。

The Zhejiang University-University of Edinburgh Institute (ZJE) is a collaboration in the field of Biomedical Sciences between Zhejiang University in China and The University of Edinburgh in Scotland, United Kingdom. ZJE takes root in China, integrates Eastern and Western educational concepts, relies on the comprehensive advantages of multiple disciplines, carries out cutting-edge basic research in the field of life and health in the future, implements research and development of cutting-edge technologies in disease diagnosis and treatment, and cultivates top-notch innovative medical compound talents with the concept of "whole-person cultivation, global immersion and whole-chain practice".

ZJE brings together world-class faculty, has two dual degree undergraduate programmes of biomedical science and biomedical informatics, seven postgraduate programmes. As of 30th, December, 2022, there are 488 undergraduates (including 6 international students) and 185 Postgraduate students (including 9 international students).

## | 领导 Leadership



**柯越海 Yuehai Ke**

院长  
Dean

浙江大学医学院病理与病理生理学系教授、博士生导师、课题组长

负责学院发展战略和规划、安全稳定、人才引进、财务、国内国际合作、校友、学科建设等方面工作。

Professor, Principal Investigator, Department of Pathology and Pathophysiology, Zhejiang University School of Medicine

Responsibilities: ZJE overall operation, ZJE strategy and development, ZJE safety management, faculty recruitment, career development and assessment, financial management, domestic and international cooperation, alumni network, development of discipline, management of relations with local bodies, hospitals and Haining city and business park.



**Sue Welburn**

执行院长  
Executive Dean

爱丁堡大学医学和兽医分子流行病学教授

负责与爱丁堡大学的合作协调、学院发展规划、国际师资引育、本研双学位项目教育教学，爱丁堡大学单学位研究生项目、国际招生、国际科研合作与技术转化、爱丁堡大学校友联络等工作。

Chair of Medical and Veterinary Molecular Epidemiology

Responsibilities: ZJE strategy and development planning, financial planning; faculty recruitment and annual assessment; dual award undergraduate and postgraduate programmes; UoE single degree postgraduate programmes; international student recruitment; international research collaboration and translation; student exchange and faculty training programmes with UoE, alumni network.



**叶治国 Zhiguo Ye**

副院长  
Vice Dean

负责纪检监察、宣传、学生思政与学生事务、行政团队管理等方面工作，协助分管财务、校友、本科生招生等工作。

Responsibilities: party affairs and administration of ZJE; inspection and monitoring; marketing and media: advertisement, newsletters; student affairs management; administrative staff recruitment and management and annual assessment; budget management: development and adherence to agreed financial plan; external awards, scholarship allocation; management of alumni network, undergraduate recruitment; undergraduate student quota managing.



**徐素宏 Suhong Xu**

副院长  
Vice Dean

浙江大学“百人计划”研究员、博士生导师

负责本科生招生及培养、科研等方面工作，协助分管人才引进、学科建设、研究生招生及培养等工作。

Principale Investigator of Zhejiang University

Responsibilities: undergraduate programmes and national student recruitment; research affairs: centre development, space allocation and development of core facility; assisting in talent recruitment, career development and grantsmanship, disciplinary development; national postgraduate recruitment and programme.



**陈晓 Xiao Chen**

副院长  
Vice Dean

浙江大学教授、博士生导师

负责研究生招生及培养等方面工作，协助分管科研工作。

Principale Investigator of Zhejiang University

Responsibilities: postgraduate recruitment and postgraduate programmes; assisting in research development.

# 人才队伍 Academic Team

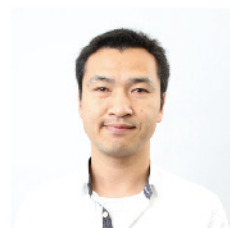
学院拥有一支由全球招聘的优秀教师及浙江大学、爱丁堡大学兼职教授组建的精英教学队伍，现有全职师资26人。在全面引进全职人才的同时，学院进一步丰富柔性引才手段，推进兼任教师队伍发展，以期为科研交叉合作、校企合作以及加深与爱丁堡大学的战略性合作建立渠道和提供人才保障。

学院面向全球积极招收优秀博士后，加强学科梯队建设，提升学科科研实力。本年度新增5位博士后，形成了15人优质博士后队伍。其中，73%毕业于全球排名TOP100的名校。本年度获得博士后专项资助2项：博士后创新人才支持计划1项，博士后国际交流计划引进项目1项。

Our faculty is comprised of distinguished professors, famous experts, experienced senior teaching fellows and outstanding young scholars from Zhejiang University, the University of Edinburgh and from global recruitment. We currently have a full-time faculty team of 26. ZJE further enriched flexible talent introduction ways and promoted the development of adjunct faculty.

ZJE actively recruits excellent postdoctoral fellows around the world. Five postdoctoral fellows joined ZJE this year, formed a high-quality postdoctoral team of 15 people, 73% of ZJE postdoctoral fellows graduated from the world's top 100 universities. ZJE has gained 1 postdoc from the Postdoctoral Innovative Talent Support Program, and 1 postdoc from the International Postdoctoral Exchange Fellowship Program (Talent-Introduction Program) .

## 新进师资与博后 New ZJE Members



邱维维  
Weiwei Qiu

研究员/Assistant Professor

邱博士研究中枢神经环路对能量平衡调控的神经机理，希望为肥胖和糖尿病的发病机理、防治和新型药物的研发提供新的思路。

Dr. Qiu has been investigating hindbrain circuitries that regulate energy homeostasis, evidenced by first authored publications e.g. Cell metabolism, Nature metabolism, Nature communications, JCI insight and eNeuron.



孟泓旭  
Hongxu Meng

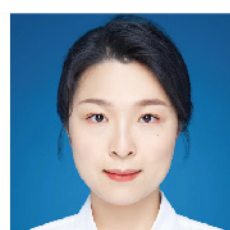
博士后 Post-doc

导师：欧阳宏伟

Supervisor: Hongwei Ouyang

课题方向：关于骨化软骨组织的生物力学解析及体外模型的构建。

Project: The biomechanical analysis of ossified cartilage tissue and construction of in vitro model



许静秀  
Jingxiu Xu

博士后 Post-doc

导师：徐素宏

Supervisor: Suhong Xu

课题方向：内源性修复蛋白感知细胞膜损伤的分子机制

Project: The molecular mechanism of endogenous repair proteins sensing cell membrane damage

博士后 Post-doc

导师：欧阳宏伟

Supervisor: Prof. Hongwei Ouyang

课题方向：骨质疏松性骨折的修复再生

Project: The strategies for regeneration of osteoporotic fractures



沈丹妮  
Danni Shen

博士后 Post-doc

导师：Mikeal Bjorklund

Supervisor: Mikeal Bjorklund

课题方向：细胞（肿瘤）大小的变化及建模

Project: Cell (tumor) size scaling.



吕佳航  
Jiahang Lv

博士后 Post-doc

导师：欧阳宏伟

Supervisor: Hongwei Ouyang

课题方向：类骨器官快速修复骨缺损以及医疗器械研发与应用

Project: The ultrafast repair of bone defects by osteo-organoid and the development and application of medical devices.



张杰  
Jie Zhang

浙江大学联合学院  
CEREMONY



# 教育教学 Education

## 本科生培养 Undergraduate

在后疫情时代背景下，学院积极探索本科教学管理模式的升级，持续规范教学实施计划和教学质量监控体系，结合科研训练，培养自主学习，协同学工完善学业帮扶；各类教学例会实时把控教学进程，全方位、多维度地稳步提高教学质量。

本年度，学院生物信息学专业入选教育部省级一流本科专业建设点，《生物信息学导论1》(Introduction to Biomedical Informatics 1) 被认定为省级一流本科课程，《高等数学》(Advanced Mathematics)、《生物信息学3》(Biomedical Informatics 3) 被认定为省级一流本科国际化课程。

With the expansion of enrollment scale, ZJE actively explored the upgrading of undergraduate teaching management mode and consolidated the responsibility of course lecturer, optimized the teaching quality supervision system, constantly updated the relevant teaching regulations, and achieved good teaching practice results.

ZJE biomedical informatics was selected into the provincial first-class undergraduate major construction sites. Introduction to Biomedical Informatics 1 was selected into the provincial first-class undergraduate curriculum construction list. Advanced Mathematics and Biomedical Informatics 3 were selected into the provincial first-class international undergraduate course.

### 招生 Enrollment

本年度，学院顺利完成第七届本科生招收工作，同时是新学费标准下的第一批学生。通过单列招生和综合评价模式，共在14个省份招收138人。

In the summer vacation, ZJE successfully completed the recruitment of the seventh undergraduate students. It is also the first batch of students under the new tuition standard. A total of 138 people were recruited from 14 provinces. The enrollment scale is closer to the maximum enrollment.

### 毕业 Graduate

2021届本科毕业生78人(含4名留学生)，其中53人为生物医学专业，25人为首届生物信息学专业毕业生。13人获得爱丁堡大学荣誉一等学士学位，59人获荣誉二等一学位，6人获荣誉二等二学位。深造率94% (海外：国内≈2.5:1)，推免比例27%，奖学金博士录取率54%，TOP20世界名校(QS2022)录取率44%。

Among the 78 graduates from ZJE in 2022, 94% of them choose to go on further studies (overseas : domestic ≈ 2.5 : 1). 27% of graduates who have continued studies got the exam-exempted postgraduate qualifications, and 54% were accepted by awarded doctoral programs. 44% of them were admitted into TOP20 universities (QS2022). 13 (16.7%) of them received a first-class honours bachelor's degree from the University of Edinburgh, and 60 (76.9%) received a second-class honours bachelor's degree.





## 科研训练 Research Training

学院本科生年度以第一作者发表论文7篇，以共同作者参与发表7篇。

在2022年浙江大学SRTP(Student Research Training Program)中，学院第五期SRTP科研训练共19组学生完成自主选题并顺利通过开题答辩，获得国家级立项3项，省级立项4项，获得学校与学院相关部门下发科研经费资助105800元。

This year, ZJE undergraduates published a total of 7 papers as the first author, another 7 papers were published as co-authors.

In 2022 ZJU SRTP (Student Research Training Program), ZJE students obtained 3 national-level project, 4 provincial-level projects, and obtained 105800 yuan of research funds issued by ZJU.

### 部分发表文章 Publication list

作者 Authors	论文标题 Title	杂志名称 Journal
Jingqi Qi, Tianqi Yu, Bangyan Hu, Hongwei Wu, Hongwei Ouyang	Current Biomaterial-Based Bone Tissue Engineering and Translational Medicine	International Journal of Molecular Sciences
Yan Xu, Jingqi Qi, Wei Sun, Wu Zhong, Hongwei Wu	Therapeutic Effects of Zoledronic Acid-Loaded Hyaluronic Acid/Polyethylene Glycol/Nano-Hydroxyapatite Nanoparticles on Osteosarcoma	Frontiers in Bioengineering and Biotechnology
Jingqi Qi, Bingbing Wu, Xiuying Chen, Wei Wei, Xudong Yao	Diagnostic biomolecules and combination therapy for pre-eclampsia	Reproductive Biology and Endocrinology

作者 Authors	论文标题 Title	杂志名称 Journal
Bowen Chen, Meng Wang, Minxin Guan	A Comparative and Comprehensive Review of Antibody Applications in the Treatment of Lung Disease	Life
Junzhi Yi, Qi Liu, Qin Zhang, Ting Gang Chew, Hongwei Ouyang	Modular protein engineering-based biomaterials for skeletal tissue engineering	Biomaterials

## 荣誉 honour

2021-2022学年我院本科生共获得：国家奖学金6人，浙江省政府奖学金19人，小米奖学金1人，南都创新奖学金1人，浙江大学奖学金108人（一等11人，二等28人，三等69人），浙江大学优秀学生34人，浙江大学“标兵”系列荣誉称号229人，学院学业奖学金92人（一等11人，二等27人，三等54人）。

In the academic year of 2021-2022, ZJE students has won 6 national scholarships, 19 Zhejiang provincial government scholarships, 1 Nandu innovation scholarship, 1 Xiaomi student scholarship, 108 Zhejiang University Scholarships (11 first-class, 28 second-class, and 69 third-class students), 32 outstanding students of Zhejiang University, 229 honorary titles of "model" of Zhejiang University, and 92 academic scholarship of ZJE (11 first-class, 27 second-class and 54 third-class).

## 创新创业 Innovation and Entrepreneurship

本年度学院3支学生团队在“互联网+”、“iGEM”等比赛中获得好成绩：“ZJUintl-iGEM”团队在国际基因工程机器大赛(iGEM)中获全国银奖；“Biothinker——FACS Sample Preparation Workstation (生息流式样本制备仪)”和“CellBank——Animal Cell Cryopreservation Service (希尔动物干细胞储存银行)”项目分别获第八届中国国际“互联网+”大学生创新创业大赛全国总决赛金奖；17位学生参与校内其他创新创业团队，并在团队中有杰出表现。

This year our student got good result in innovation and entrepreneurship competition. ZJUintl- iGEM team won the silver medal of iGEM, Biothinker——FACS Sample Preparation Workstation and CellBank——Animal Cell Cryopreservation Service two programmes won the golden medal of "Internet Plus" Students Innovation and Entrepreneurship Competition. 17 students participated in other innovation and entrepreneurship teams in the school and have outstanding performance in the team.

本年度学院积极完善“全链实践”培育环节，创建Biomed-X创新创业实验室，与9家企业共建实习实践基地，共形成11家企业的多样化实习实践基地链条，为学生提供一线实践科研经验，为其今后职业生涯带来更多思考。

ZJE actively improved the "whole chain practice" cultivation link, established Biomed-X innovation and entrepreneurship lab, and jointly built practice base with 9 enterprises, forming a diversified practice base chain of 11 enterprises, providing students with front-line practice and research experience, and potential options for their future career.

## 实践基地列表 List of Practice Bases

1	浙江大学爱丁堡大学联合学院-迪安诊断技术集团股份有限公司学生实习实践基地 ZJE-DIAN DIAGNOSTICS Practice Base
2	浙江大学爱丁堡大学联合学院-苏州工业园区学生实习实践基地 ZJE-Suzhou Industrial Park Practice Base
3	浙江大学爱丁堡大学联合学院-艾立康药业股份有限公司 ZJE-Alicorn Practice Base
4	浙江大学爱丁堡大学联合学院-杭州艾迪康医学检验中心有限公司 ZJE-ADICON Practice Base
5	浙江大学爱丁堡大学联合学院-浙江普康生物技术股份有限公司 ZJE-Zhejiang Pukang Biotechnology Co.,LTD Practice Base
6	浙江大学爱丁堡大学联合学院-北京奇科创咨询有限公司 ZJE- Beijing Qikechuang Consulting Co., Ltd Practice Base
7	浙江大学爱丁堡大学联合学院-浙江昂大久力生物制药有限公司 ZJE-ANG DA JIU LI Practice Base
8	浙江大学爱丁堡大学联合学院-杭州杰毅生物技术有限公司 ZJE-Matrix Practice Base
9	浙江大学爱丁堡大学联合学院-海宁市产业技术研究院再生医学材料中心 ZJE-Regenerative Medical Materials Center, Haining Industrial Technology Research Institute Practice Base
10	浙江大学爱丁堡大学联合学院-浙江天科高新技术发展有限公司 ZJE-Zhejiang Tianke Practice Base
11	浙江大学爱丁堡大学联合学院-杭州艾森医药研究有限公司 ZJE-ACEA Practice Base



## 研究生教育 Postgraduate

本年度学院研究生项目稳步发展，培养模式不断优化。截止2022年12月，共有研究生185人，包括硕士生84人，博士生91人。

This year, ZJE postgraduate programmes develop steadily, and the training model is constantly optimized. As of December 2022, there are 185 graduate students, including 84 master students and 91 PhD students.

## 招生 Enrollment

学院研究生数量稳定增长，2022级双学位项目及浙大单学位项目共录取21名博士和21名硕士研究生。录取的硕士研究生生源来自985高校占比提升5%（达25%），博士研究生985生源占比为43%（相比去年提高3%）。爱大单学位项目录取8位博士及23位硕士研究生，其中74%的新生来自英国利物浦大学、思克莱德大学、贝尔法斯特女王大学、爱丁堡大学等海外知名高校。

The number of graduate students has increased steadily. The dual degree programme of 2022 and the single degree program of Zhejiang University admitted a total of 21 PhD and 21 master students. The number of postgraduate students admitted from 985 universities increased by 5% (to 25%), and the number of PhD students from 985 universities increased by 3% over last year to 43%. UoE degree programme offers 8 PhD and 23 master's degree candidates, 74% of whom are from University of Liverpool, University of SC Clyde, Queen's University Belfast, University of Edinburgh and other well-known overseas universities.

## 荣誉 honour

2021-2022学年我院研究生共获得：国家奖学金3人、三好研究生8人、优秀研究生干部5人、优秀研究生32人，社会实践先进个人1人，社会工作奖学金1人，2021级硕士班获评先进班级。

In the academic year of 2021-2022, ZJE's postgraduate students have won 3 National Scholarships, 8 Merit Graduate Students, 5 Outstanding Graduate Leader, 32 Outstanding Graduate Students, and 1 Individual Social Work Award, 1 Social Work Scholarship, cohort of 2021 awarded Advanced Class.

## 爱丁堡大学单学位项目 UoE Postgraduate Programme

爱丁堡大学单学位项目采用自主招生方式，按爱丁堡大学的入学标准招录，学生入学后全程在ZJE进行培养，学业合格者，将被授予爱丁堡大学硕士学位或博士学位。这一项目开创了爱丁堡大学办学史上首次将研究生学位在国外授予的先河。

首届爱丁堡大学单学位硕士项目9名硕士生顺利毕业，其中4人拿到1等荣誉学位，3人拿到二等一荣誉学位，首批毕业生优秀率（一等）达44%，超过英国本地项目毕业生的优秀率。

UoE degree postgraduate programme has pioneered UoE's history that a postgraduate degree will be awarded abroad for the first time. This programme adopts the independent recruitment method and based on the admission standards of the University of Edinburgh. Students will be cultivated in ZJE after enrollment, and those who pass the study will be awarded a master's degree or doctor's degree from the University of Edinburgh.

The first class of UoE degree master programme successfully graduated 9 master students, 4 of whom got the distinguish degree, 3 of whom got the merit degree. The excellence rate of the first batch of graduates (first class) reached 44%, which exceeded the excellence rate of graduates from local programs in the UK.



2022年度，学院获批国家自然科学基金共获资助7项，总中标率36.84%。其中面上项目5项，中标率45.45%；青年科学基金项目2项，中标率33.33%；浙江省自然科学基金2项，其中省重点项目1项，省联合基金项目1项，中国博士后科学基金获资助1项，ZJE种子基金5项。在高水平学术期刊发表文章21篇（第一作者或通讯作者单位为ZJE）。

In 2022, ZJE has gained 7 National Natural Science Foundation programs, 5 are the General Programs and 2 are the Youth Scientists Funds; 2 Natural Science Funds of Zhejiang Province. And ZJE has gained 1 China Postdoctoral Science Foundation, 1 Postdoctoral Innovative Talent Support Program, 1 International Postdoctoral Exchange Fellowship Program (Talent-Introduction Program), 5 ZJE Seed Funding.

As to publications, ZJE has published 21 SCI papers this year (The first author or corresponding author address is ZJE).

## 科研项目 Research Projects

项目来源 Project Sources	项目名称 Project Title	项目负责人 Project Manager
国家自然科学基金委 National Natural Science Funds of China 面上项目General Project	有丝分裂期RhoA蛋白的机械响应调控机制 Regulatory mechanism of RhoA protein mechanical response during mitosis	Chew Ting Gang
国家自然科学基金委 National Natural Science Funds of China 面上项目General Project	m6A读码器蛋白IGF2BP1调控人胚胎干细胞多能性状态的机理研究 Mechanism of m6A code reader protein igf2bp1 regulating pluripotency of human embryonic stem cells	陈迪 Di Chen
国家自然科学基金委 National Natural Science Funds of China 面上项目General Project	G蛋白调节因子RGS22在新生儿出血性脑积水和纤毛稳态中的作用研究 Role of G protein regulator rgs22 in hemorrhagic hydrocephalus and ciliary homeostasis in neonates	张倩婷 Qianting Zhang
国家自然科学基金委 National Natural Science Funds of China 面上项目General Project	肺癌谱系转化的系统生物学研究 Study on lineage transformation of lung cancer by system biology	方兆元 Zhaoyuan Fang
国家自然科学基金委 National Natural Science Funds of China 面上项目General Project	IGFBP5-TCH3介导的干细胞均质化治疗骨质疏松性骨缺损 IGFBP5-TCH3 mediated homogenization of stem cells for the treatment of osteoporotic bone defects	袁渊 Yuan Yuan
国家自然科学基金委 National Natural Science Funds of China 青年科学基金项目 Youth Scientists Fund	以PSMA7条件敲除模型研究蛋白酶体在哺乳动物表皮发育中的作用 Study on the role of proteasome in mammalian epidermal development by using PSMA7 conditional knockout model	张倩婷 Qianting Zhang

# 科学研究 Research

项目来源 Project Sources	项目名称 Project Title	项目负责人 Project Manager
国家自然科学基金委 National Natural Science Funds of China 青年科学基金项目 Youth Scientists Fund	CDC-42感知线虫表皮细胞膜损伤的分子机制研究 Study on the molecular mechanism of CDC-42 sensing the damage of nematode epidermal cell membrane	许静秀 Jingxiu Xu
浙江省自然科学基金委员会 National Natural Science Funds of Zhejiang Province 重点项目 Key Project	评估蝙蝠来源冠状病毒的物种间传播风险和人畜共患病潜力 Evaluation of cross-species zoonotic potential for bat-borne coronaviruses	Aaron Irving
浙江省自然科学基金委员会 National Natural Science Funds of Zhejiang Province 企业创新发展联合基金 Joint Fund for Enterprise Innovation and Development	肿瘤耐药谱系转变的动态调控机制和干预策略 Dynamic regulation mechanisms of and intervention strategies for drug-resistant lung cancer lineage transition	方兆元 Zhaoyuan Fang
中国博士后科学基金 China Postdoctoral Science Foundation 特别资助 (站前) Key Fund	CDC-42感知线虫表皮细胞膜损伤的分子机制研究 Molecular mechanism of CDC-42 sensing epidermal cell membrane repair in <i>C. elegans</i>	许静秀 Jingxiu Xu

## 部分文章 Part of Publications

作者 Authors	论文标题 Title	杂志名称 Journal
<b>Yi Xiong</b> , Chao Yu, <b>Qianting Zhang</b>	Ubiquitin-Proteasome System-Regulated Protein Degradation in Spermatogenesis	Cells
<b>Xinyu Xiang</b> , Yu Tao, Jonathan DiRusso, Fei-Man Hsu, <b>Jinchun Zhang</b> , <b>Ziwei Xue</b> , Julien Pontis, Didier Trono, <b>Wanlu Liu</b> & Amander T. Clark	Human reproduction is regulated by retrotransposons derived from ancient Hominidae-specific viral infections	Nature Communications
<b>Yuefeng Wu</b> , Hai Song	A Comparative and Comprehensive Review of Antibody Applications in the Treatment of Lung Disease	MDPI
<b>Xiaoping Zhu</b> , <b>Tianyi Xu</b> , <b>Chen Peng</b> , <b>Shihua Wu</b>	Advances in MALDI Mass Spectrometry Imaging Single Cell and Tissues	Frontiers
<b>Husein Bagulo</b> , <b>Ayodele O Majekodunmi</b> , <b>Susan C Welburn</b> , Langbong Bimi	Hepatitis E seroprevalence and risk factors in humans and pig in Ghana	BMC Infectious Diseases
<b>Prasanth Manohar</b> , Madhav Madurantakam Royam, <b>Belinda Loh</b> , Bulent Bozdogan, Ramesh Nachimuthu, <b>Sebastian Leptihn</b>	Synergistic Effects of Phage-Antibiotic Combinations against <i>Citrobacter amalonaticus</i>	ACS Publication
<b>Xinyu Xiang</b> , Yu Tao, Jonathan DiRusso, Fei-Man Hsu, <b>Jinchun Zhang</b> , <b>Ziwei Xue</b> , Julien Pontis, Didier Trono, Wanlu Liu, Amander T. Clark	Human reproduction is regulated by retrotransposons derived from ancient Hominidae-specific viral infections	Nature Communications

作者 Authors	论文标题 Title	杂志名称 Journal
Sreeram Vallabhaneni, <b>Jian Liu</b> , Marion Morel, <b>Jixin Wang</b> , Francesco J DeMayo, Weiwen Long	Conditional ERK3 overexpression cooperates with PTEN deletion to promote lung adenocarcinoma formation in mice	Molecular Oncology
Yongjing Liu, Cong Feng, <b>Yincong Zhou</b> , <b>Xiaotian Shao</b> , <b>Ming Chen</b>	Simulating the Dynamic Intra-Tumor Heterogeneity and Therapeutic Responses	Cancers
Lize Wu, <b>Ziwei Xue</b> , <b>Siqian Jin</b> , <b>Jinchun Zhang</b> , <b>Yixin Guo</b> , <b>Yadan Bai</b> , Xuexiao Jin, <b>Chaochen Wang</b> , Lie Wang, Zuozhu Liu, <b>James Q Wang</b> , <b>Linrong Lu</b> , <b>Wanlu Liu</b>	huARdb: human Antigen Receptor database for interactive clonotype-transcriptome analysis at the single-cell level	Nucleic Acid Research
Xiaojiao Fan, <b>Jing Chen</b> , Yajun Zhang, Siyi Wang, Wenqian Zhong, Huiyu Yuan, Xia Wu, <b>Chaochen Wang</b> , <b>Yixin Zheng</b> , Yuan Wei, Ying Xiao	Alpinetin promotes hair regeneration via activating hair follicle stem cells	Chin Med
Haoyuan Shi, <b>Ting Ji</b> , Chenxi Zhai, <b>Junting Lu</b> , <b>Wenwen Huang</b> , Jingjie Yeo	Thermo- and ion-responsive silk-elastin-like proteins and their multiscale mechanisms	J Mater Chem B
<b>Xinchen Shen</b> , Haoyuan Shi, <b>Hongda Wei</b> , <b>Boxuan Wu</b> , <b>Qingyuan Xia</b> , Jingjie Yeo, <b>Wenwen Huang</b>	Engineering Natural and Recombinant Silks for Sustainable Biodevices	Front Chem
Yan Xu, <b>Jingqi Qi</b> , <b>Wei Sun</b> , Wu Zhong, Hongwei Wu	Therapeutic Effects of Zoledronic Acid-Loaded Hyaluronic Acid/Polyethylene Glycol/Nano-Hydroxyapatite Nanoparticles on Osteosarcoma	Front Bioeng Biotechnol

作者 Authors	论文标题 Title	杂志名称 Journal
Shu-Bao Liu, Xiang-Min Meng, Yu-Meng Li, Jun-Meng Wang, Hui-Hui Guo, <b>Chaochen Wang</b> , Bing-Mei Zhu	Histone methyltransferase KMT2D contributes to the protection of myocardial ischemic injury	Front Cell Dev Biol
<b>Qin Wu</b> , <b>Jiajun Dong</b> , Xinying Bai, Yuan Jiang, Jinjin Li, Shiqi Fan, Yahong Cheng, Gaofeng Jiang	Propionate ameliorates diabetes-induced neurological dysfunction through regulating the PI3K/Akt/eNOS signaling pathway	Eur J Pharmacol
<b>Jing Zhang</b> , Juan Xiao, <b>Yixuan Wang</b> , <b>Xiao Zheng</b> , <b>Jiajun Cui</b> , <b>Chaochen Wang</b>	A universal co-expression gene network and prognostic model for hepatic-biliary-pancreatic cancers identified by integrative analyses	FEBS Open Bio
Xiao Lu, Chengtang Lv, Yuechao Zhao, <b>Yufei Wang</b> , Yao Li, Chengyue Ji, Zhuanghui Wang, Wu Ye, Shunzhi Yu, Jianling Bai, Weihua Cai	TSG-6 released from adipose stem cells-derived small extracellular vesicle protects against spinal cord ischemia reperfusion injury by inhibiting endoplasmic reticulum stress	Stem Cell Res Ther
<b>Qiushi Liang</b> , <b>Yuanzhu Ma</b> , Xudong Yao, Wei Wei	Advanced 3D-Printing Bioinks for Articular Cartilage Repair	Int J Bioprint
Zhipeng Ai, <b>Xinyu Xiang</b> , Yangquan Xiang, Iwona Szczerbinska, Yuli Qian, Xiao Xu, Chenyang Ma, <b>Yaqi Su</b> , <b>Bing Gao</b> , Hao Shen, Muhammad Nadzim Bin Ramli, <b>Di Chen</b> , Yue Liu, Jia-Jie Hao, Huck Hui Ng, Dan Zhang, Yun-Shen Chan, <b>Wanlu Liu</b> , Hongqing Liang	Krüppel-like factor 5 rewires NANOG regulatory network to activate human naive pluripotency specific LTR7Ys and promote naive pluripotency	Cell Rep
Lei Qu, Xinyu He, <b>Qian Tang</b> , Xiao Fan, <b>Jian Liu</b> , Aifu Lin	Iron metabolism, ferroptosis, and lncRNA in cancer: knowns and unknowns	J Zhejiang Univ Sci B

## | 科研中心 Research Center

本年度，学院建立四个“疾病主题式”研究中心，旨在培养具有社会责任感的未来生物医学科学家，促进人类健康事业发展。This year, ZJE constructed four dedicated research centres to tackle the world's most pressing health issues through world-class research with real-world impact. Our centres aim to cultivate future biomedical scientists with social responsibility to advance human health.

1. Centre for Infection Immunity and Cancer (CIIC)
2. Centre for Subcellular Biology and Signalling (CSBS)
3. Centre for Systems Biology and Data Science (CSBDS)
4. Centre for Regeneration and Stem Cell Therapy (CRSCT)

## | 公共平台 ZJE Core Facility

本年度，学院公共技术平台全面支持校区科研单位的各种需求，共享大型仪器34台，为校内超30个课题组等单位提供了科研服务支撑，累计服务约2.2万小时；开展培训129场，共培训771人次；获得2022年度浙江大学实验技术“揭榜挂帅”攻关需求立项项目一项。

This year, ZJE core facility fully supported the various needs of scientific research institutions in the campus, shared 34 large instruments and has provided service support for more than 30 research groups inside and outside the campus. The cumulative service is about 22,000 hours; 129 training sessions were held, with a total of 771 people trained. The project submitted by ZJE Core Facility was selected as one of key research projects of experimental technology in Zhejiang University 2022.

## | 动物中心 ZJE Laboratory Animal Facility

学院动物实验中心在2022年度顺利完成365×24小时不间断稳定运行，2022年年内饲养笼位增长96%，年饲养费收入同比2021年增长291%，增长显著。本年度共为11个课题组进行生物净化服务18次。截止至2022年11月，中心共入驻课题组20个，实验人员134人，科研服务涵盖本学院超过50%的课题组和其它各合作科研院所包括浙江大学基础医学院、浙江大学生命科学研究院、ZJUI、国际校区功能高分子国际研究中心和先进光子学国际研究中心等，支撑科研成果产出。

ZJE laboratory animal facility successfully completed 365×24 hours uninterrupted and stable operation in 2022. In 2022, the number of cages increased by 96%, and the annual income of feeding fees increased by 291% compared with that in 2021, showing a significant increase. This year 11 research groups carried out biological purification services for 18 times. By November 2022, 20 research groups and 134 experimental personnel have been stationed in the Center. The research services cover more than 50% of the research groups of the ZJE and other cooperative research institutes, including the School of Basic Medicine Sciences of ZJU, Life Sciences Institute of ZJU, ZJUI, International Research Center for Functional Polymers and International Research Center for Advanced Photonics, etc.

## | 实验室安全培训 Laboratory safety Training

本年度，ZJE启动了“全要素全覆盖”实验室系列安全培训计划，旨在提高师生安全意识和实验室安全防范技能，进一步强化实验室安全管理，营造出安全、规范、高效的校园实验工作环境。共举办了8场培训。

This year, ZJE launched a series of laboratory safety training programs of "Full elements and full coverage", aiming at improving teachers and students' safety awareness and laboratory safety prevention skills, further strengthening laboratory safety management, and creating a safe, standardized and efficient campus experimental work environment. A total of 8 training sessions have been held.



# 文化&活动

## Events



### 2021年工作总结会暨2022年教职工新年联欢会

#### 2021 Annual Review Conference & 2022 New Year Party

2022年1月6日，浙江大学爱丁堡大学联合学院（ZJE）举行2021年工作总结会暨2022年教职工新年联欢会。学院师生员工齐聚一堂，共同回顾硕果累累的2021，展望充满希望的2022。

On January 6th, ZJE held the 2021 Annual Review Conference & 2022 New Year Party for all ZJEers. We were gathered together to review 2021 and look forward to the 2022.



### 浙江大学-爱丁堡大学生物医学合作十周年庆暨全球生物医学论坛

#### 10th Anniversary of BMS Collaboration Between ZJU and UoE & BMS Forum

2022年5月20日，“交叉进化 惟实励新”浙江大学-爱丁堡大学生物医学合作十周年庆暨全球生物医学论坛顺利召开，来自全球21个知名高校的专家学者及产业精英分享了生物医学领域的最新研究进展，教学动态及产业思考，探讨了新形势下生物医学面临的机遇、挑战及应对。

教育部国际合作与交流司副司长闫炳辰在线参会并致辞，浙江大学校长吴朝晖院士，爱丁堡大学校长Peter Mathieson发表视频致辞，浙江大学副校长、国际校区党委书记何莲珍主持开幕式。

20th May, 2022, 10th Anniversary of BMS Collaboration Between ZJU and UoE & BMS Forum was held at International campus, ZJU. Nearly 30 experts, scholars and industry elites from 21 world-class universities shared the latest research progress, teaching trends and industrial thinking in the biomedical field, and discussed the opportunities, challenges and responses faced by biomedicine under the new situation.



Bingchen Yan, deputy director of the Department of International Cooperation and exchanges of the Ministry of Education, delivered a speech online. Zhaohui Wu, President of Zhejiang University and Peter Mathieson, President of the University of Edinburgh delivered video speeches to mark the anniversary. Vice President of ZJU, Secretary of the Communist Party Committee of International Campus, ZJU Lianzhen He presided over the opening ceremony.



### 毕业系列活动 ZJE class of 2022 graduation series activities

2022年6月ZJE2022届毕业系列活动顺利开展。6月2日举行了ZJE毕业生校友树认领仪式及毕业生代表座谈会，6月23日晚，ZJE2022届毕业生晚会在浙江大学海宁国际校区多功能厅举行。ZJE 2022届本科毕业生、UoE单学位硕士毕业生、双学位博士毕业生和老师们身着正装、礼服欢聚在多功能厅，度过了难忘的夜晚。

In June 2022, ZJE class of 2022 graduation series activities were officially launched. ZJE alumni tree claiming ceremony and graduate representative symposium were held on 2 June. On the evening of June 23, ZJE class of 2022 graduation ceremony was held in the multi-function hall of International Campus, ZJU. ZJE class of 2022 undergraduate graduates, UoE single degree master graduates, dual degree PhD graduates and teachers dressed in formal clothes and gowns gathered in the multi-function hall and spent an unforgettable night.



### ZJE2022年暑期务虚会议 ZJE 2022 Summer Retreat Meeting

8月17日下午，ZJE召开2022年暑期务虚会议，学院班子、全体师资及主管参加会议。副院长徐素宏作学院发展工作报告。执行院长Sue Welburn线上参会并作会议总结。ZJE held the 2022 summer retreat meeting on August 17th, which was attended by the executive team, faculty, and senior administration. Vice Dean Suhong Xu made a report on the ZJE development. Executive Dean Sue Welburn participated online and made a summary of the meeting.



### 本科生新生欢迎仪式 Undergraduate Freshmen Welcome Ceremony

2022年9月11日，140位来自九州四海的22级ZJEers相聚在美丽的国际校区，他们即将开启全新的征程。

浙江大学党委常委、副校长，国际校区党委书记何莲珍、国际校区院长欧阳宏伟等校区领导，ZJE院长柯越海以及学院领导、老师和2022级本科新生出席仪式，爱丁堡大学生物医学院院长Mike Shipston和ZJE执行院长Sue Welburn的欢迎和祝福，也通过视频传达到每位新生。

The ZJE new student welcome ceremony was held at the International Campus, Zhejiang University (ZJU) on September 11th, with 140 new undergraduate students in attendance.

Many distinguished guests attended the ceremony including Vice Dean of ZJU, Secretary of the Communist Party Committee of International Campus, Lianzhen He, Dean of International Campus, ZJU Hongwei Ouyang and other International Campus leaders. ZJE Dean Yuehai Ke and other leaders, faculty of ZJE. The Dean of Biomedical Sciences, the University of Edinburgh Mike Shipston, and ZJE Executive Dean Sue Welburn also conveyed their welcome and blessings to the new students through video.



### ZJE秋季毅行 ZJE Trailwalk

2022年11月19日，伴随着浓浓的秋意，浙江大学爱丁堡大学联合学院第三届毅行正式拉开帷幕。来自ZJE以及兄弟办学单位校区各部门师生200余人组成了23支队伍，全部顺利完成全长约7.5公里的毅行。

On November 19, 2022, ZJE's third Trail-walk started. More than 200 teachers and students from ZJE and other departments of the international campus formed 23 teams. They braved wind and rain, successfully completed the 7.5km long journey.



### I 爱浙谭 iZJEer Talk

2022年2月，“爱浙谭 iZJEer Talk”系列座谈会正式开启，旨在通过学院领导与学生、老师、行政支撑人员等的面对面深入交流，畅通ZJE民主管理渠道，筑牢学院发展基石，助力学院师生快速成长。本年度爱浙谭已举办11期。

In February 2022, iZJEer Talk officially opened. It aims to smooth the democratic management channels of ZJE through in-depth face-to-face exchanges between executive team and students, faculty and administrative team, build a solid foundation for the development of the ZJE, and help the rapid growth of ZJEers. As of December 2022, 11 talks have been held.



### I ACT讲座 ACT Talk

本年度举办ACT系列讲座8场，涵盖海外留学申请经验、推免经验分享及企业宣讲等内容，共吸引超1000人次参与，精准对接学生生涯发展需求，为就业质量提供保障。

Organized 8 ACT seminars, covering overseas study application experience sharing, exam-exempted application experience sharing, and corporate publicity, which attracted more than 1000 people to participate, precisely meeting the needs of students' career development and guaranteeing the quality of employment.



### I Biomed-X Research Seminar

为打造学院学术品牌，本年度线上线下学术交流活动稳定开展。全年学院共举办17次Biomed-X系列学术分享活动，邀请到来自清华大学、浙江大学、西湖大学等专家学者分享自己科研领域最新进展。

Biomed-X Research Seminar aims to establish an exchange platform for ZJE faculty and students, and to promote research cooperation and arouse research inspiration. A total of 17 seminars were held this year.



### I Weekly Symposium

ZJE Weekly Symposium是ZJE于2021年开始举行的，由学院各PI实验室学生为主讲人的学生讲座系列，本年度共举办了25次活动。此讲座为学生及老师们提供了互相认识、交流科研、互相学习与帮助的平台，塑造更有活力的学术氛围。

ZJE weekly symposium is a seminar series held by ZJE since 2021, with students from ZJE PI laboratories as the main speakers. A total of 25 seminars were held this year. ZJE weekly symposium provides a platform for students and faculty to know each other, exchange scientific research, and help each other, and create a more dynamic academic atmosphere.